

NORM ATTAINABLE OPERATORS

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ABSTRACT. Properties of operators between Banach spaces have been studied over many decades. One of the most considered is norm-attainability, whose characterization with regard to density is still elusive. Subreflexivity fully answers the density question when the codomain is a scalar field, however, a generalization to the class of norm-attainable operators has yielded only partial results, by fixing either the domain or the codomain. We present the notion of norm attainability, density and dentability of operators. This is an ongoing research and is a crucial contribution to the mathematical analysis and science at large, especially in optimization and geometry of Banach spaces.

Keywords: Norm attainable; Density; Dentability.

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